Supplemental Risk Analysis of Potential Air Emissions from the Confined Disposal Facility for the Indiana Harbor and Shipping Canal Sediment Dredging and Disposal Project

EPA Region 5 - Chicago

Geographic location or area of activity: Northwest Indiana

Description of activity: To maintain channel depths in the Indiana Harbor and Shipping Canal, the U.S. Army Corps of Engineers (USACE) must periodically dredge the bottom sediment. The harbor was last dredged in 1972. Because the sediment contains a variety of pollutants, it is important it is handled and disposed of properly. The USACE is currently constructing a confined disposal facility (CDF) for the sediment in East Chicago, Indiana. The site consists of about 168 acres of land which was operated by an oil refinery for many years. Dredging is expected to begin in 2009 and continue for 30 years. The siting of the disposal facility has been extremely controversial in the local community.

Due to continued public concerns over health impacts of the CDF and opposition to the disposal of contaminated sediments in the community, Region 5 conducted a comprehensive, multimedia, supplemental human health risk assessment to evaluate potential human health risks from air emissions from the site. (A previous risk assessment had been conducted in 1995 as part of the Environmental Impact Statement (EIS), but was considered inadequate by some stakeholders.) Upon request of the community, the risk assessment considered cancer and non-cancer health effects in six nearby residential areas, two nearby schools, students, adults, children and nursing infants. Evaluated exposure routes and pathways evaluated included chronic and acute inhalation of vapors and particulate, long term consumption of homegrown produce, chronic incidental ingestion of soil, long-term consumption of fish caught in local waterways and long-term skin contact with contaminated sediment.

The final report was issued in December 2006. Availability sessions and a public meeting were held to present the findings of the report to the public and interested parties on December 2006. In brief, the results of the risk assessment indicated that estimated human health risks from future operation of the site are within the range considered acceptable under current agency guidance. Region 5 has provided a response to comments received from environmental groups and other stakeholders and had a number of public dialogues regarding the report. Continuous cooperation, collaboration and communication with the local community, State agencies and federal partners lead to the success of the project and ultimately, local acceptance of the dredging project and disposal facility.

Interagency partners: U.S. Army Corps of Engineers, Indiana Department of Environmental Management

Local partners: East Chicago Waterway Management Board, Northwest Indiana Coalition for a Clean Environment

Activity URL: The full report and fact sheet are available at http://www.epa.gov/region5/sites/indianaharbor/